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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,706	10/15/2004	Norimasa Furukawa	259934US6PCT	2833
22850	7590	10/25/2007	EXAMINER	
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			DUNN, DANIELLE N	
			ART UNIT	PAPER NUMBER
			2875	
			NOTIFICATION DATE	DELIVERY MODE
			10/25/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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## Office Action Summary

Application No.

10/511,706

Applicant(s)

FURUKAWA, NORIMASA

Examiner

Danielle Dunn

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 19-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 19-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 October 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 7/02/2007 and 7/31/2007.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Amendment***

Applicant's amendment filed on 8/26/07 has been entered. Claims 1 and 2 have been amended. Claims 1 and 10-16 have been cancelled. Claims 19-22 have been added. Claims 1, 2 and 19-22 are still pending in this application, with claims 1 and 2 being independent.

### ***Information Disclosure Statement***

1. The information disclosure statements (IDS) submitted on 7/02/2007 and 7/31/2007 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "combination of a plurality of backlight units of different shapes" per claim 2, must be shown or the feature(s) canceled from the claim(s). It should be noted that if applicant intends to claim different shapes, different shapes should be disclosed (i.e. triangles, circles, squares). When one who is ordinarily skilled in the art reads the claim, it is presumed that applicant only discloses squares. It is also noted that a rectangle can be a square. Therefore, Applicant is not presumed to be disclosing different shapes. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. It is not clear how each of the single backlight units has a single light source and then further includes two additional light sources. Since originally it is claimed that there is **a light source** is this light source the same light source that is being reflected by a light-reflecting unit, and included in the first and second backlight units? Furthermore, Applicant claims a plurality of backlights and a first and a second backlight. It appears as if all of these backlights are the same backlight units. There is nothing to differentiate the plurality of backlight units from the first and second backlight units.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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7. Claims 1, 19, 21 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Cho (US 6,580,477).

With respect to claim 1, Cho teaches a backlight that is configured to illuminate a back of a video display unit that is formed by a single panel. Cho also teaches that the backlight (back light assembly 600) comprises a plurality of backlight units to be incident to a lighting surface (display unit 100 is the surface to be illuminated). Cho teaches that each of the backlight units has a light source and a light guide plate (light supply unit group 200 includes a plurality of light supply units 150 each having a light guiding plate 110 and a lamp unit 130); col. 3, ln 38-41), a light reflecting unit configured to reflect a light emitted from the light source onto the light guide plate (a reflective layer which is beneath the light guide plate; col. 3, ln 57-59).

With respect to claim 19, Cho teaches the plurality of backlight units being arranged in alternating directions in at least one row such that a backlight unit in the at least one row differs in orientation with respect to an adjacent backlight unit in the at least one row by 180 degrees (shown in Fig. 7, at least one row of alternating backlight units such that the two adjacent backlight units in the middle are different in orientation by 180 degrees).

With respect to claim 21, Cho teaches the light reflecting unit of each of the plurality of backlight units being arranged at a first end of the light guide plate of each of the plurality of the backlight units (the reflective layer is formed beneath the light guiding

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plate; col. 3, ln 57; beneath the light guiding plate is at one end, the bottom end, of the light guide plate). Cho teaches the plurality of backlight units are arranged to be incident to the lighting surface in alternating directions such that a first end of a first backlight unit is oriented in an opposite direction with respect to a first end of a second backlight unit that is adjacent to the first backlight unit (as shown in Fig. 7, the two backlight units in the center of the light supply unit group 200 are arranged to be incident to the lighting surface in alternating directions and a first end of the first backlight unit is oriented in an opposite direction of a first end of a second backlight unit that is adjacent to the first backlight unit).

With respect to claim 22, Cho teaches a plurality of backlight units that include at least two pairs of backlight units (two light supply groups 160 and 170; as shown in Fig. 7). Cho teach that each of the at least two pair of backlight units including two pair of backlight units arranged in end to end in the same direction (shown in Fig. 7) and the two pair of backlight units are arranged in opposite directions with respect to each other (shown in Fig. 7).

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cho (US 6,580,477) further in view of Toshiyuki et al. (EP 0 545 429)

With respect to claim 2, Cho teaches a backlight that is configured to illuminate a back of a video display unit that is formed by a single panel. Cho also teaches that the backlight (back light assembly 600) comprises a plurality of backlight units to be incident to a lighting surface (display unit 100 is the surface to be illuminated). Cho teaches that each of the backlight units has a light source and a light guide plate (light supply unit group 200 includes a plurality of light supply units 150 each having a light guiding plate 110 and a lamp unit 130); col. 3, ln 38-41), a light reflecting unit configured to reflect a light emitted from the light source onto the light guide plate (a reflective layer which is beneath the light guide plate; col. 3, ln 57-59). Cho teaches the light guide plate being configured to direct the light incident on it through the light-reflecting unit onto the lighting surface (as light enters the light guide plate, it is reflected off of the reflective layer back through the light guide plate and onto the lighting surface). Cho teaches a first backlight unit (light supply unit group 150 as shown in Fig. 3) including a single light source (lamp unit 130 as shown in Fig. 3).



Cho does not explicitly teach having a second backlight unit that includes a single light source and at least two light guide plates, so that the first backlight has a different shape than the second backlight unit. However, Toshiyuki et al. teach a divided light guide (4), as pointed out by Applicant on page 8, line 3 of the response filed on 5/17/2007. Cho and Toshiyuki are analogous art because they are from the same field of endeavor, backlights. At the time of the invention it would have been obvious to one having ordinary skill in the art having the teachings of Cho and Toshiyuki et al. before him or her, to modify the light guide plate of Cho to include the divided light guide plate of Toshiyuki et al. because this would allow the rays of light to be uniformized through a reflection board and/or a diffusion board according to the application for which it is used.

11. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cho (US 6,580,477).

With respect to claim 20, Cho does not explicitly teach the backlight units being arranged in alternating directions in at least two rows. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the backlight units being arranged in alternating directions in at least two rows depending on the size of the display needing illumination, since it has been held that mere duplication of essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

***Response to Arguments***

12. Regarding Applicants arguments regarding the drawing objections, it should be noted that if applicant intends to claim different shapes, different shapes should be disclosed (i.e. triangles, circles, squares). When one who is ordinarily skilled in the art reads the claim, it is presumed that applicant only discloses squares. It is also noted that a rectangle can be a square. Therefore, Applicant is not presumed to be disclosing different shapes. Furthermore, in regards to Applicant's claim that "different shapes" are disclosed in an example on page 27, lines 11-18 and in Figures 22A and 22B, if Applicant wants to claim different sizes then he/she should so. Different sizes of the same shapes, does not constitute having different shapes (i.e. a ten-inch square is the same shape as a ten-foot square).

13. Applicant's arguments with respect to claims 1 and 2 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Danielle Dunn whose telephone number is 571-270-3039. The examiner can normally be reached on M-F 7:30-5:00 with alternate Friday's off.

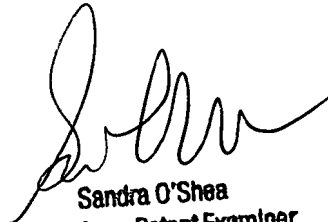
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on 571-272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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